UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/086,602	03/04/2002	Gordon K. Chang	SVOXP002	3174

22434   7590   05/17/2007

BEYER WEAVER LLP
P.O. BOX 70250
OAKLAND, CA 94612-0250

EXAMINER
NGUYEN, STEVEN H D

ART UNIT	PAPER NUMBER
2616	

MAIL DATE	DELIVERY MODE
05/17/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/086,602	CHANG ET AL.
	Examiner	Art Unit
	Steven H.D Nguyen	2616

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>28 February 2007</u>.

2a)☒ This action is **FINAL.**   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>20-38</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>20-38</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date <u>2/28/07</u>.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____ .

DETAILED ACTION

Claim Rejections - 35 USC § 101

1.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2.   Claim 20 rejected under 35 U.S.C. 101 because the claimed invention is directed to a data structure of a database that do not fall within any of the four categories of statutory subject matter of 35 U.S.C. § 101.   The claimed invention is not limited to a practical application. Viewed as a whole, the claimed invention merely expresses a data base which includes at least one component such as gateway etc... It does not impart any function to the processing system, i.e., the claimed invention is not practical applied. Instead, the claimed invention merely describes a database; so it is clearly not a process because they do not have any limitation to a practical application. The other three § 101 classes of machine, compositions of matter and manufactures can be group as product claims, and the product classes have required physical structure or material. The claimed database does not itself perform any useful concrete and tangible result, i.e., no post solution activity, and thus does not fit within the definition of a machine. In addition, the claimed database is an abstract construct; therefore, the claimed database does not fall within the product classes, machine and composition of matter.

Claim Rejections - 35 USC § 112

3.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4.   Claims 28 and 38 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for

failing to particularly point out and distinctly claim the subject matter which applicant regards as

the invention.

As claims 28 and 38, a Novell Directory Services® (NDS), a Microsoft Active Directory

Services® (ADS); a Netscape® Directory Server are vague and indefinite because they are a

trademark.

Claim Rejections - 35 USC § 102

5.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed
> in the United States before the invention by the applicant for patent or (2) a patent granted on an application for
> patent by another filed in the United States before the invention by the applicant for patent, except that an
> international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this
> subsection of an application filed in the United States only if the international application designated the United
> States and was published under Article 21(2) of such treaty in the English language.

6.   Claims 21, 27 and 29-31 rejected under 35 U.S.C. 102(e) as being anticipated by

Krishnaswamy (USP 6909708).

Krishnaswamy discloses a communication system comprising a public switched

telephone (PST) network (Fig 19F, Ref 1950); an internet protocol (IP) network (Fig 19F, Ref

1910); a plurality of gateway networks (Fig 19F, Ref 1950) coupled to the PST network and the

IP network to route a telephone call over the PST network or the IP network; and an enterprise

directory server (Fig 19F, Directory is enterprise directory server or Fig 10A, Ref 1, 2, 3)

coupled to the plurality of gateway networks, the enterprise directory server comprising an

enterprise directory that is a directory of named objects, including users, network devices and

network services and having an extensible schema configured to provide data to support routing

of telephone calls (Fig 10B, Ref enterprise Directory server 1082, user profile, telephone

gateway and email address etc. and Fig 10A, Ref 1-3).

Regarding claim 27, Krishnaswamy discloses the enterprise directory comprises in its

extensible schema at least one object selected from a group consisting of: an object configured to

represent a GateKeeper; an object configured to represent a Gateway; an object configured to

represent a Multipoint Control Unit; an object configured to represent a GateKeeper Exchange;

and an object configured to represent communication system user with associated telephony

services attributes (Fig 10A, Ref Directory server provides information about gateway or

gatekeeper for internet telephony).

Regarding claim 29, Krishnaswamy discloses the telephones comprise IP telephones (Fig

10A, 1051).

Regarding claim 30, Krishnaswamy discloses the IP telephones include H.323 compliant

telephones (Fig 19).

Regarding claim 31, Krishnaswamy discloses the telephones comprise non-IP telephones

including at least one telephone selected from the group consisting of: private branch exchange

telephones; and plain old telephones (POTS) (Fig 10A).

Claim Rejections - 35 USC § 103

7.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8.   Claims 22-26 and 28 rejected under 35 U.S.C. 102(e) as being anticipated by

Krishnaswamy in view of Guy (USP 6870827).

Regarding claim 22, Krishnaswamy fails to disclose the claimed invention. In the same

field of endeavor, Guy discloses each of the plurality of gateway networks comprise a gateway

database capable of providing information for routing the telephone call over the IP network, and

wherein the gateway database is created from information dredged from the enterprise directory

(Col. 10, lines 52-65, a local directory and master directory includes information to route a call).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the

invention was made to apply a method and system for synchronizing the databases as disclosed

by Guy into the teaching of Krishnaswamy. The motivation would have been to prevent human

error.

Regarding claim 23, Krishnaswamy and Guy fails to disclose the claimed invention. in

the users of the communication system can make changes to objects in the enterprise directory

representing components of the communication system through a web browser coupled to the IP

network. However, the examiner take an official notice that a method and system for allowing a

user to interface with a database in order to modify the information is well known and expected

in the art at the time of invention was made. Therefore, it would have been obvious to one of

ordinary skill in the art at the time of invention was made to implement a GUI such web into a

database into the system and method of Guy and Krishnaswamy. The motivation would have

been reduce the cost of the call.

Regarding claim 24, Guy discloses automatically update the gateway databases to reflect changes in the enterprise directory (Col. 9, lines 10-40).

Regarding claim 25, Guy discloses update the gateway databases when a new gateway network is added to the communication system and information for the new gateway network entered in the enterprise directory server (Col. 9, lines 10-40).

Regarding claim 26, Guy discloses update a gateway database associated with one of the plurality of gateway networks when the gateway network is placed in operation (Col. 9, lines 10-40).

Regarding claim 28, Krishnaswamy fails to disclose the enterprise directory includes at least one directory selected from the group consisting of a Novell Directory Services (NDS) compatible directory; a Microsoft Active Directory Services.RTM. (ADS) compatible directory; a Microsoft NT.RTM. domain compatible directory; an X.500 compatible directory; a Netscape.RTM. Directory Server; and a lightweight directory access protocol (LDAP) server. However, However, the examiner takes an official notice that a database includes at least one directory selected from the group consisting of: a Novell Directory Services (NDS) compatible directory; a Microsoft Active Directory Services.RTM. (ADS) compatible directory; a Microsoft NT.RTM. domain compatible directory; an X.500 compatible directory; a Netscape.RTM. Directory Server; and a lightweight directory access protocol (LDAP) server is well known and expected in the art at the time of invention was made. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to implement one of these directory into the system and method of Krishnaswamy. The motivation would have been to turn the internet into a multimedia network in order to reduce the cost of telephone call.

9.   Claims 32-37 rejected under 35 U.S.C. 103(a) as being unpatentable over Krishnaswamy

in view of Curry (USP 6078582)

        Regarding claim 32, Krishnaswamy discloses a method of operating a communication

system having a plurality of gateway networks coupled to an internet protocol (IP) network and

to a public switched telephone (PST) network to route a telephone call over the IP network, the

method comprising steps of providing a directory server comprising an enterprise directory that

is a directory of named objects, including users, network devices and network services and

having an extensible schema configured to provide data to support routing of telephone calls (Fig

10A, Ref 1, 2, 3). However, Krishnaswamy fails to disclose accessing the directory server,

including accessing the extensible schema of the enterprise directory, to create a plurality of

gateway databases, each gateway database associated with one of the plurality of gateway

networks and each gateway database comprising a list of telephone numbers that each of the

plurality of gateway networks will accept; connecting a user to one of the plurality of gateway

networks via a calling telephone; accepting a telephone number entered by the user; accessing

the gateway database associated with the gateway network to determine which of the plurality of

gateway networks will accept the telephone number entered by the user; and routing the

telephone call from the calling telephone over the IP network. In the same field of endeavor,

Curry discloses a method and system for accessing the extensible schema of the enterprise

directory (Fig 6, Ref 80), to create a plurality of gateway databases (Fig 7, Ref 120), each

gateway database associated with one of the plurality of gateway networks (Fig 7, Ref 120) and

each gateway database comprising a list of telephone numbers that each of the plurality of

gateway networks will accept (Fig 10A); connecting a user to one of the plurality of gateway

networks via a calling telephone (Fig 6, Ref 64); accepting a telephone number entered by the

user (Fig 9A, Ref 120); accessing the gateway database associated with the gateway network to

determine which of the plurality of gateway networks will accept the telephone number entered

by the user (Fig 9A, Ref 124-18); and routing the telephone call from the calling telephone over

the IP network (Fig 9A, Ref 130).

Regarding claim 33, Curry discloses the step of providing a directory server comprises

the steps of coupling the enterprise directory having the extensible schema to the IP network,

wherein the schema of the enterprise directory is extended with objects representing components

of the communication system to create the directory server (Fig 10 and Fig 6, Ref 80).

Regarding claim 34, Curry discloses the step of providing a directory server comprises

the steps of designating one of the plurality of gateway databases as a master database (Fig 6,

Ref 80 is a master database for gateway); designating the remaining gateway databases as slave

databases (Fig 7, Ref 120 is slave database of each gateway); and creating within a schema of the

master database objects representing components of the communication system to create the

directory server (Fig 6, Ref 80 implicitly discloses the master database objects that used to create

database for directory server).

Regarding claim 35-37, Krishnaswamy and Curry fail to disclose the step of providing a

directory server further comprises the steps of accessing a company database coupled to the IP

network; and copying the company database to a master database; accessing the enterprise

directory server to provide a company white pages comprising lists of users and telephone

numbers and the step of providing a company white pages comprises the step of providing

company white pages in which the telephone numbers depend on a location from which the

company white pages is accessed. However, the examiner takes an official notice that a method

for copying a database into another database and provide a white page that includes the

telephone numbers and users depend on a location from which the company white pages is

accessed are well known and expected in the art. Therefore, it would have been obvious to one

of ordinary skill in the art at the time of invention was made to copy a database into another

database and provide a white or yellow page with telephone number and user depending on the

location of the accessed user into the teaching of Curry and Krishnaswamy. The motivation

would have been to save time and reduce human errors.

10.   Claims 20 and 38 rejected under 35 U.S.C. 102(e) as being anticipated by Krishnaswamy

in view of Rainis (USP 6310873).

Regarding claim 20, Krishnaswamy discloses an article of manufacture including at least

one tangible medium having an enterprise directory configured for IP telephony embodied

thereon, the article of manufacture comprising enterprise directory embodied on the at least one

tangible medium, wherein the enterprise directory is a directory of named objects, including

users, network devices and network services (Fig 10B, Ref Directory server 1082, user profile,

telephone gateway and email address etc. and Fig 10A, Ref 1-3); wherein a schema of the

enterprise directory includes at least one object for representing a component of an IP telephony

system, the component selected from a group consisting of: a GateKeeper; a Gateway; a

Multipoint Control Unit (MCU); a GateKeeper Exchange; and a user with associated telephony

service attributes (Fig 10A, Ref Directory server provides information about gateway or

gatekeeper for internet telephony). However, Krishnaswamy X.500-compatible. In the same

field of endeavor, Rainis discloses LDAP to be used to create a directory server (Fig 3, Ref 64).

Since, LDAP is well known in the art. Therefore, it would have been obvious to one of

ordinary skill in the art at the time of the invention was made to apply a method and system for

storing the information into a database which is compatibly with x.500 such as LDAP as

disclosed by Rainis into the teaching of Krishnaswamy. The motivation would have been to turn

the internet into a multimedia network in order to reduce the cost of telephone call.

Regarding claim 38, Krishnaswamy discloses a communication system comprising a

public switched telephone (PST) network; an internet protocol (IP) network; a plurality of voice

gateways coupled to the PST network and the IP network, each of the plurality of voice gateways

configured to route a telephone call over the PST network or the IP network (Fig 10A); and

general purpose enterprise directory services comprising a distributed network of directory

servers coupled to the plurality of voice gateways, the directory services comprising an

enterprise directory that is a directory of named objects, including users, network devices and

network services and having an extensible schema configured to provide data to support routing

of telephone calls and configured to provide data to support routing of telephone calls over the IP

network including having an extensible schema including at least one IP telephony object

selected from a group consisting of an object configured to represent a GateKeeper; an object

configured to represent a Gateway; an object configured to represent a Multipoint Control Unit;

an object configured to represent a GateKeeper Exchange; and an object configured to represent

communication system user with associated IP telephony services attributes (Fig 10A, Ref

Directory server provides information about gateway or gatekeeper for internet telephony).

However, Krishnaswamy fails to discloses the enterprise directory services comprise at least one

directory service selected from the group consisting of a Novell Directory Services® (NDS); a

Microsoft Active Directory Services® (ADS); an X.500 based directory-services; a Netscape®

Directory Server; and a lightweight directory access protocol (LDAP) compatible directory-

services, whereby a single point of entry is provided for making additions, changes and deletions

of the IP telephony objects by making additions, changes and deletions in the schema of the

enterprise directory services. However, In the same field of endeavor, Rainis discloses a

directory is LDAP database includes gateway addresses and providing adding and deleting the

gateway address (col. 5, lines 25-38 and col. 11, lines 54-65, Fig 3, Ref 64 is selected).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the

invention was made to apply a method for adding, deleting and changing information from

LDAP server having the gateway addresses into the system of Krishnaswamy. The motivation

would have been to turn the internet into a multimedia network in order to reduce the cost of

telephone call.

Conclusion

11.   Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven H.D Nguyen whose telephone number is (571) 272-3159. The examiner can normally be reached on 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Welling Chin can be reached on (571) 272-3134. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Steven H.D Nguyen
Primary Examiner
Art Unit 2616